TOPOGRAPHIC SURVEY CONTROL POINT RECORD

STATION LONG NAME	MU04	
STATION NUMBER	MU04	
4 CHAR ID	MU04	
COUNTR	IRAQ	
LOCATION	AL MUTHANNA	
SURVEYING AGENCY	IGRS	
DATE (OF DESCRIPTION)	08 JULY 2005	

CONTENTS	YES	NO	NO OF PAGES
FIELD COORDINATE VALUES	Х		1
OFFICE COORDINATE VALUES	Х		1
STATION MONUMENT & SITE DETAILS	Х		1
STATION DIAGRAM	Х		1
ACCESS MAP	Х		1
ACCESS DESCRIPTION	Х		1
APPROACH PHOTOGRAPHS	Х		1
CARDINAL POINT PHOTOGRAPHS	Х		2

RECORD OF VISITS

DATE OF VISIT	NAME	UNIT	REMARKS

ADDITIONAL DETAILS/ENCLOSURES

CONTENTS	NO OF PAGES

SECURITY CLASSIFICATION

FIELD COORDINATE VALUES

STATION LONG NAME	MU04
4 CHAR ID	MU04
STATION NUMBER	MU04

THIS STATION IS NEW	YES
NEARLY IDENTICAL WITH	N/A

FIELD VALUES FROM THE RECEIVER / HAND HELD GPS – IN WGS84

LATITUDE N	29°09'21.39"	
LONGITUDE E	45°18'40.10"	
HT (M)	+352	
GRID ZONE DESIGNATOR	38R	
UTM / MGRS GRID	38R NT 30259 25303	
SURVEYING AGENCY	IGRS	

FIELD INPUT BY: LCPL AVIS	UNIT: IGRS	DATE: 08 JULY 05
FIELD CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 08 JULY 05

PAGE 1 OF 9

OFFICE COORDINATE VALUES

WGS 84 ADJUSTED VALUES AS AT: 25 Aug 05

LATITUDE N	29° 09' 21.39303''
LONGITUDE E/W	045° 18' 40.05559''
SPHEROIDAL HT (M)	344.862
EGM96 GEOID MODEL HT (M)	-4.378
ORTHOMETRIC HT (M)	349.240
VERTICAL DATUM	WGS 84
GEOID MODEL USED	EGM 96
RELATIVE TO	CORS STATIONS
RELATIVE POSITION ACCURACY (M)	0.024
RELATIVE HEIGHT ACCURACY (M)	0.015
ADJUSTING AGENCY	OPUS
ADJUSTMENT DATE	25 AUG 2005

LOCAL DATUM VALUES AS AT: 25 Aug 05

SPHEROID	N/A
PROJECTION	N/A
GRID	N/A
VERTICAL DATUM	N/A
LATITUDE N/S	N/A
LONGITUDE E/W	N/A
EASTINGS (M)	N/A
NORTHINGS (M)	N/A
SPHEROIDAL HT (M)	N/A
ORTHOMETRIC HT (M)	N/A
GRID ZONE DESIGNATOR	N/A
TRANSFORMATION AGENCY	N/A
TRANSFORMATION DATE	N/A

GRAVITY VALUE: N/A		PE OF STN: N/A	REF: N/A	
AIR PHOTO: N/A	REF: N/A		SCALE: N/A	
IMAGERY: N/A	REF: N/A		SCALE: N/A	

OFFICE INPUT BY: LCPL COWARD	UNIT: IGRS	DATE: 25 AUG 2005
OFFICE CHECKED BY: LCPL DICKEN	UNIT: IGRS	DATE: 25 AUG 2005

STATION MONUMENT AND SITE DETAILS

STATION LONG NAME: MU04

STATION NUMBER: MU04 4 CHAR ID: MU04

LOCATION: SOUTH AL MUTHANNA COUNTRY: IRAQ

STATION ADDRESS: AUMIR BORDER FORT

TEL:N/A FAX: N/A

LAND OWNER ADDRESS: IRAQI POLICE

TEL: N/A FAX: N/A

TYPE OF MARK: HARN

CONDITION: GOOD

MARK SETTING: FINE POINT ON REBAR NO OF REBARS:1

MONUMENT PHOTO / SKETCH

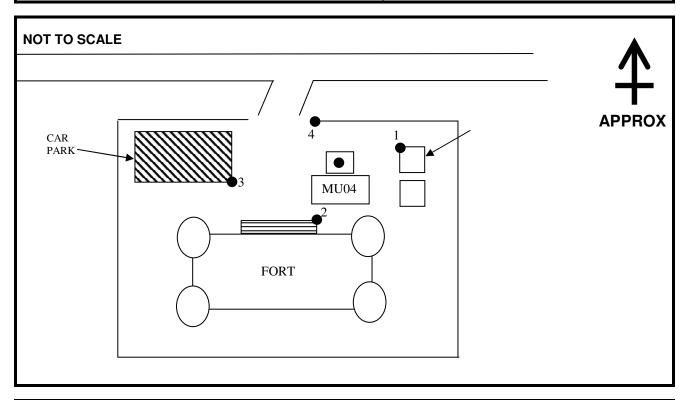


PREPARED BY: LCPL AVIS	UNIT: IGRS	DATE: 08 JULY 05
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 08 JULY 05

PAGE 3 OF 9

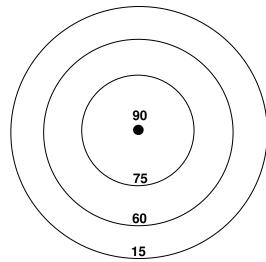
STATION DIAGRAM

STATION LONG NAME: MU04
STATION NUMBER: MU04
4 CHAR ID: MU04



NO	DESCRIPTION	BRG/HORZ ANGLE	DISTANCE m
1	N/W CORNER OF SHELTER	241°	12.8
2	BOTTOM OF EASTERN SIDE OF STEPS	35°	11
3	S/E POST OF CAR PORT	113°	14
4	EAST SIDE OF GATE	153°	11.5

OBSCURITY DETAILS



PREPARED BY: LCPL AVIS	UNIT: IGRS	DATE: 08 JULY 05
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 08 JULY 05

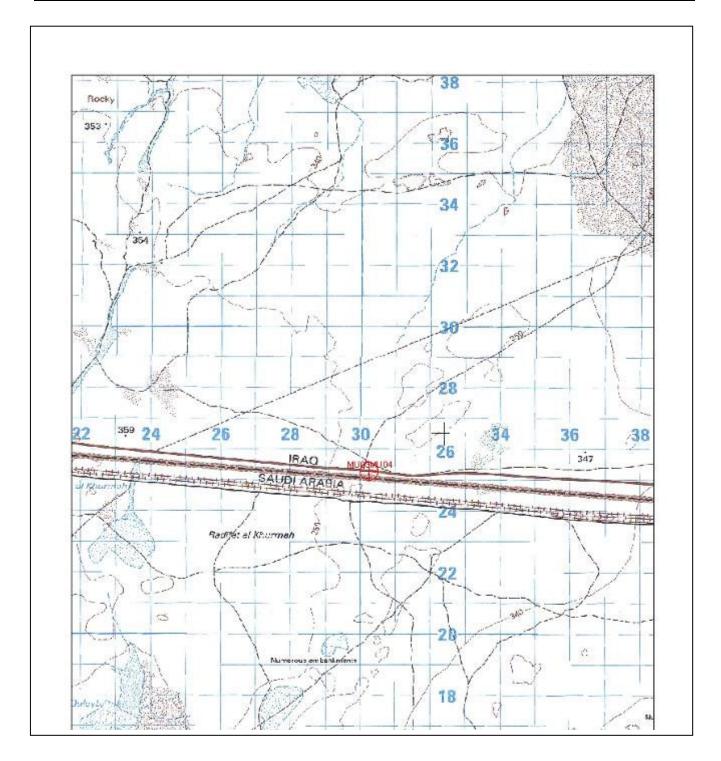
PAGE 4 OF 9

REVISION DATE: 05 FEB 98 TOPO FORM 01e

ACCESS MAP

STATION LONG NAME: MU04
STATION NUMBER: MU04
4 CHAR ID: MU04

MAP DETAILS	SERIES: K643	SHEET: 5048
EDITION: 2-NIMA	SCALE: 1: 100 000	GR: 38R NT 30259 25303



PREPARED BY: LCPL AVIS	UNIT: IGRS	DATE: 08 JULY 05
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 08 JULY 05

ACCESS DESCRIPTION

STATION LONG NAME: MU04
STATION NUMBER:MU04
4 CHAR ID: MU04

MAP DETAILS	SERIES: K643	SHEET: 5048
EDITION: 2-NIMA	SCALE: 1: 100 000	GR: 38R NT 30259 25303

From major road junction East of As Samawah Grid reference PV304 008. Follow metal road South for approximately 79km up to junction at Grid Reference PU064 319. Continue travelling southeast for approximately 90km. At road junction approximate Grid Reference 760 705. Travel in a southwesterly direction for approximately 67km. This should lead to a loose surface track travel West for approximately 80km until you reach the Aumir border fort. The point is located in the graveled area in the forts compound.

PREPARED BY: LCPL AVIS	UNIT: IGRS	DATE: 08 JULY 05
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 08 JULY 05

PAGE 6 OF 9

APPROACH PHOTOGRAPHS

STATION LONG NAME: MU04

STATION NUMBER: MU04 4 CHAR ID: MU04

NEAR APPROACH FACING SOUTH



FAR APPROACH FACING SOUTH



TAKEN BY: LCPL AVIS DATE TAKEN: 08 JULY 05

CARDINAL PHOTOGRAPHS

STATION LONG NAME: MU04

STATION NUMBER: MU04 4 CHAR ID: MU04

NORTH



SOUTH



TAKEN BY: LCPL AVIS DATE TAKEN: 08 JULY 05

CARDINAL PHOTOGRAPHS

STATION LONG NAME: MU04

STATION NUMBER: MU04 4 CHAR ID: MU04

EAST



WEST



TAKEN BY: LCPL AVIS DATE TAKEN: 08 JULY 05